

1 TABLE S2. PCR and sequencing primers used in this study.  
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| Primer <sup>a</sup> | Position <sup>b</sup> | Orientation | Function   | Specificity <sup>c</sup> | Sequence                             |
|---------------------|-----------------------|-------------|------------|--------------------------|--------------------------------------|
| F24                 | 9-27                  | Forward     | PCR        | A,B,C                    | GAG TTT GAT YMT GGC TCA G            |
| AD30                | 342-357               | Forward     | Sequencing | A,B,C                    | CTR CGG RAG GCA GCA G                |
| Z24                 | 789-806               | Forward     | Sequencing | A,B,C                    | TAG ATW CCC YGG TAG TCC              |
| Y34                 | 1100-1114             | Forward     | Sequencing | A,B                      | YAA CGA GCG CAA CCC                  |
| AD29                | 342-357               | Reverse     | Sequencing | A,B,C                    | CTG CTG CCT YCC GYA G                |
| Y31                 | 519-533               | Reverse     | Sequencing | A,B,C                    | TKA CCG CGG CTG CTG                  |
| Z25                 | 907-926               | Reverse     | Sequencing | A                        | CCG TCW ATT YMT TTR AGT TT           |
| Y33*                | 907-926               | Reverse     | Sequencing | B                        | CCG TCA ATT CCT TTR WGT TT           |
| Z26                 | 1374-1391             | Reverse     | Sequencing | A,B                      | AAG RCC CGR RAA CGK ATT              |
| Z27*                | 1389-1404             | Reverse     | Sequencing | A,B,C                    | GGG CGG TGT GTA CAA G                |
| M98                 | 1483-1501             | Reverse     | PCR        | Spiro/Syner              | GTT ACG ACT TCA CCC YCC T            |
| F01                 | 1487-1505             | Reverse     | PCR        | Bacteroides              | CCT TGT TAC GAC TTA GCC C            |
| C72                 | 1492-1509             | Reverse     | PCR        | A,B,C                    | GYT ACC TTG TTA CGA CTT              |
| Y36                 | 1525-1541             | Reverse     | PCR        | A,B                      | GAA GGA GGT GWT CCA DCC <sup>d</sup> |

3 <sup>a</sup>Primers with asterisks were used if primer above failed, or if primer was recognized as  
4 appropriate by phylogenetic analysis of partial sequence.5 <sup>b</sup>Position using *E. coli* numbering.6 <sup>c</sup>Primers work for the most organism in the following phyla: A, Proteobacteria, Firmicutes,  
7 Actinobacteria, Fusobacteria, Bacteroidetes, Chloroflexi, and Spirochaetes; B, Synergistes and

1 TM7; and C, OP11. The “Spiro/Syner” reverse primer is highly specific for members of the  
2 phyla Spirochaetes and Synergistetes. Members of the order *Coriobacteriales* in the Phylum  
3 Actinobacteria are also amplified. The *Bacteroides* primer is selective for members of the phyla  
4 Bacteroides, TM7 and SR1.

5 <sup>d</sup>Primer Y36 has a 5'-G for better addition of an overhanging A on the complementary strand for  
6 TA cloning.

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